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Docket No.: 4266-0126PUS1  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Armin SCHNEIDER et al.

Application No.: 10/589,823

Confirmation No.: 2434

Filed: August 17, 2006

Art Unit: 3735

For: USE OF TWEAK MODULATORS AND  
INHIBITORS FOR THE TREATMENT OF  
NEUROLOGICAL CONDITIONS

Examiner: Not Yet Assigned

**INFORMATION DISCLOSURE STATEMENT**  
**(SUBMISSION AFTER FILING OF AN APPLICATION BUT BEFORE FINAL**  
**REJECTION OR NOTICE OF ALLOWANCE OR CONCURRENTLY WITH A RULE**  
**1.114 RCE APPLICATION)**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, applicant(s) hereby submit(s) an Information Disclosure Statement for consideration by the Examiner.

I. LIST OF PATENTS, PUBLICATIONS OR OTHER INFORMATION

The patents, publications, or other information submitted for consideration by the Office are listed on the PTO-SB08(s), attached hereto.

II. COPIES

- ☒ a. Copies of cited U.S. patents and patent application publications are not included.  
Copies of foreign patent documents and non-patent literature are included.

☐ b. Some or all of the documents listed on the PTO-SB08 are not enclosed because they were cited in the International Search Report and copies should already be in the PTO file. If copies are needed, please contact the undersigned.

☐ c. REFERENCES PREVIOUSLY CITED OR SUBMITTED - Pursuant to 37 C.F.R. §1.98(d), consideration of information listed on the PTO-SB08 form(s) is requested since any patents, publications, or other information which are listed on the PTO-SB08 form(s) but for which copies are not enclosed herewith, were previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. § 120:

U.S. Appl. No(s) and U.S. Filing Date

### III. CONCISE EXPLANATION OF THE RELEVANCE

(check at least one box)

☒ a. DOCUMENTS IN THE ENGLISH LANGUAGE - The patents, publications, or other information listed on the attached PTO SB08 are in the English language and therefore, do not require a statement of relevancy.

☐ b. DOCUMENTS NOT IN THE ENGLISH LANGUAGE - A concise explanation of the relevance of all patents, publications, or other information listed that is not in the English language is as follows:

☒ c. ENGLISH LANGUAGE SEARCH REPORT - An English language version of the search report or action that indicates the degree of relevance found by the foreign office is attached, thereby satisfying the requirement for a concise explanation. See MPEP 609(III)(A)(3).

☒ d. OTHER - The following additional information is provided for the Examiner's consideration. **WO 00/42073, WO 02/22166, Desplat-Jego et al., Potrovita et al. and Yepes et al. are referenced in the Search Report dated May 25, 2005 attached herewith. Adams et al., Principles of Neurology and Remington Pharmaceutical Science, Mack Publishing Co., are standard text books illustrating common technical knowledge and are not attached.**

IV. FEES (check one box)

☐ a. This Information Disclosure Statement is being filed concurrently with the filing of a new patent application; therefore, no fee is required.

☐ b. This Information Disclosure Statement is being filed concurrent with the filing of a continuation-in-part, continuation, or divisional patent application; therefore, no fee is required.

☐ c. This Information Disclosure Statement is being filed within three months of the filing date of a national application (37 C.F.R. § 1.97(b)(1)). No fee or statement is required.  
*(This section is not to be used with RCE's.)*

☐ d. This Information Disclosure Statement is being filed within three months of the date of entry of the national stage as set forth in § 1.491 in an international application (37 C.F.R. § 1.97(b)(2)). No fee or statement is required.

☐ e. This Information Disclosure Statement is being filed concurrently with the filing of a Request for Continued Examination under § 1.114 (37 C.F.R. § 1.97(b)(4)). No fee or statement is required.

☒ f. This Information Disclosure Statement is being filed before the mailing date of a first Action on the merits (37 C.F.R. § 1.97(b)(3)). No fee or statement is required. In the event that a first Office Action on the merits has been issued, please consider this IDS under 37 C.F.R. § 1.97(c) and see the statement under 37 C.F.R. § 1.97(e) below, or, if no statement has been made, charge our deposit account for the fee as required by 37 C.F.R. § 1.17(p).

☐ g. This Information Disclosure Statement is being filed before the mailing date of a Final Office Action under 37 C.F.R. § 1.113 (See 37 C.F.R. § 1.97(c)(1)) or before the mailing date of a Notice of Allowance under 37 C.F.R. § 1.311 (See 37 C.F.R. § 1.97(c)(2)).

☐ No statement; therefore, a fee as required by 37 C.F.R. § 1.17(p) is attached.

or

☐ See the statement below. No fee is required.

V. STATEMENT UNDER 37 C.F.R. § 1.97(e)

(check only one box)

The undersigned hereby states that:

☐ a. **Each item of information contained in the IDS was first cited in any communication from a foreign Patent Office in a counterpart foreign application not more than 30 days prior to the filing of this IDS; or**

☐ b. Each item of information contained in the IDS was first cited in any communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS; or

☐ c. No item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of the IDS.

☐ d. Some of the items of information were cited in a communication from a foreign Patent Office. As to this information, the undersigned states that each item of information contained in the IDS was first cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby states that no item of this remaining information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application and, to the best of my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this statement.

VI. PAYMENT OF FEES (check one box)

☐ The required fee is listed on the attached Fee Transmittal.

☒ No fee is required.

If the Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule and charge the appropriate fee to Deposit Account No. 02-2448.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to our Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

Dated: May 15, 2007

Respectfully submitted,

By Marc S. Weiner (2049062)

Marc S. Weiner

Registration No.: 32,181

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Attorney for Applicant

Attachment(s):

- ☒ PTO/SB/08
- ☒ Documents
- ☒ Foreign Search Report
- ☐ Fee
- ☐ Other:



Used in Lieu of PTO/SB/08A/B  
(Based on PTO 04-07 version)

<b>Substitute for form 1449/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Complete if Known</b>	
				Application Number	10/589,823-Conf. #2434
				Filing Date	August 17, 2006
				First Named Inventor	Armin SCHNEIDER
				Art Unit	3735
				Examiner Name	Not Yet Assigned
Sheet	1	of	2	Attorney Docket Number	4266-0126PUS1

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	AA*	US-4,276,110	06-30-1981	Bilhorn	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	MM-DD-YYYY			
	BA	WO-00/42073-A1	07-20-2000			✓
	BB	WO-02/22166-A2	03-21-2002			✓

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \* CITE NO.: Those application(s) which are marked with an single asterisk (\*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CA	Orlinick et al., Cell Signal, Vol. 10, No. 8, pp. 543-551 (1998)	
	CB	Chicheportiche et al., The Journal of Biological Chemistry, Vol. 272, No. 51, pp. 32401-32410 (December 19, 1997)	
	CC	Han et al., Biochemical and Biophysical Research Communications, Vol. 305, pp. 789-796 (2003)	
	CD	Wiley et al., Cytokine & Growth Factor Reviews, Vol. 14, pp. 241-249 (2003)	
	CE	Saas et al., GLIA, Vol. 32, pp.102-107 (2000)	
	CF	Cleveland et al., Nature Reviews/Neuroscience, Vol. 2, pp.806-819 (November 2001)	
	CG	Ishigaki et al., Journal of Neurochemistry, Vol. 82, pp.576-584 (2002)	
	CH	Li et al., Science, Vol. 288, pp.335-339 (April 14, 2000)	
	CI	Mochizuki et al., Proc. Natl. Acad. Sci., USA, Vol. 98, No. 19, pp.10918-10923 (September 11, 2001)	
	CJ	Xu et al., Nature Medicine, Vol. 8, No. 6, pp. 600-606 (June 2002)	
	CK	Viswanath et al., The Journal of Neuroscience, Vol. 21, No. 24, pp.9519-9528 (December 15, 2001)	
	CL	Hartmann et al., Neurology, Vol. 58, pp.308-310 (January 2002)	
	CM	Leker et al., Brain Research Reviews, Vol. 39, pp.55-73 (2002)	
	CN	Zheng et al., Circulation, Vol. 104, pp.2158-2163 (2001)	
	CO	Bottiger et al., Heart, Vol. 82, pp.674-679 (1999)	
	CP	Safar, Circulation, Vol. 74, pp.IV-138-IV-153 (December 1986)	
	CQ	Hossmann, Resuscitation, Vol. 26, pp.225-235 (1993)	
	CR	Safar et al., Crit Care Med, Vol. 30, No. 4, pp.S140-S144 (2002)	
	CS	Kelsey et al., Am. J. Emerg. Med., Vol. 4, pp.72-86 (1986)	
	CT	Abramson et al., N. Eng. J. Med., Vol. 314, No. 7, pp.397-403 (February 13, 1986)	

Examiner Signature		Date Considered	
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Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/589,823-Conf. #2434
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				First Named Inventor	Armin SCHNEIDER
				Art Unit	3735
				Examiner Name	Not Yet Assigned
Sheet	2	of	2	Attorney Docket Number	4266-0126PUS1

	CU	Kelsey et al., Controlled Clin Trials, Vol. 12, pp.525-545 (1991)	
	CV	Abramson et al., The New England Journal of Medicine, Vol. 324, No. 18, pp.1225-1231 (May 2, 1991)	
	CW	Compston et al., The Lancet, Vol. 359, pp.1221-1231 (April 6, 2002)	
	CX	Thompson et al., Proc Natl. Acad Sci., USA, Vol. 98, No. 20, pp.11650-11655 (September 25, 2001)	
	CY	Cannon et al., Proc Natl. Acad Sci., USA, Vol. 99, No. 5, pp.3228-3233 (March 5, 2002)	
	CZ	Kohler et al., Nature, Vol. 256, pp.495-497 (August 7, 1975)	
	CA1	Jakubowski et al., Journal of Cell Science, Vol. 115, No. 2, pp.267-274 (2002)	
	CB1	Kurreck, Eur. J. Biochem., Vol. 270, pp.1628-1644 (2003)	
	CC1	Eckstein, Antisense & Nucleic Acid Drug Development, Vol. 10, pp.117-121 (2000)	
	CD1	Hughes et al., Drug Discovery Today, Vol. 6, No. 6, pp.303-315 (March 2001)	
	CE1	Liang et al., Eur. J. Biochem., Vol. 269, pp.5753-5758 (2002)	
	CF1	Brummelkamp et al., Science, Vol. 296, pp.550-553 (April 19, 2002)	
	CG1	Acsadi et al., Human Gene Therapy, Vol. 7, pp. 129-140 (January 20, 1996)	
	CH1	Quantin et al., Proc. Natl. Acad. Sci. USA, Vol. 89, pp.2581-2584 (April 1992)	
	CI1	Ragot et al., Nature, Vol. 361, pp.647-650 (February 18, 1993)	
	CJ1	Rabinowitz et al., Curr. Opin. Biotechnol., Vol. 9, No. 5, pp.470-475 (1998)	
	CK1	Federico, Curr. Opin. Biotechnol., Vol. 10, No. 5, pp.448-453 (1999)	
	CL1	Latchman, Gene, Vol. 264, No. 1, pp.1-9 (2001)	
	CM1	Kaneda et al., Molecular Therapy, Vol. 6, No. 2, pp.219-226 (August 2002)	
	CN1	Kaneda, Molecular Membrane Biology, Vol. 16, pp.119-122 (1999)	
	CO1	Kay et al., Nature Medicine, Vol. 7, No. 1, pp.33-40 (January 2001)	
	CP1	Somia et al., Nature Reviews, Vol. 1, p.91-99 (November 2000)	
	CQ1	van Deutekom et al., Neuromuscular Disorders, Vol. 8, pp.135-148 (1998)	
	CR1	Jaynes et al., Molecular and Cellular Biology, Vol. 6, No. 8, pp.2855-2864 (August 1986)	
	CS1	Gossen et al., Proc. Natl. Acad. Sci. USA, Vol. 89, pp.5547-5551 (June 1992)	
	CT1	Rossi et al., Pharmac. Ther., Vol. 50, pp.245-254 (1991)	
	CU1	Hampel et al., Nucleic Acids Research, Vol. 18, No. 2, pp.299-304 (1990)	
	CV1	Cao et al., The Journal of Neuroscience, Vol. 22, No. 13, pp.5423-5431 (July 1, 2002)	
	CW1	Mi et al., Molecular Therapy, Vol. 2, No. 4, pp.339-347 (October 2000)	
	CX1	Morris et al., Nature Biotechnology, Vol. 19, pp.1173-1176 (December 2001)	
	CY1	Park et al., Journal of General Virology, Vol. 83, pp.1173-1181 (2002)	
	CZ1	Emerich et al., Clin Pharmacokinet, Vol. 40, pp.105-123 (2001)	
	CA2	Siegal et al., Clin Pharmacokinet, Vol. 41, No. 3, pp.171-186 (2002)	
	CB2	Brenner et al., Nature Biotechnology, Vol. 18, pp.630-634 (June 2000)	
	CC2	Velculescu et al., Science, Vol. 270, pp.484-487 (October 20, 1995)	
	CD2	Audic et al., Genome Res., Vol. 7, pp.986-995 (1997)	
	CE2	Desplat-Jego et al., Journal of Neuroimmunology, Vol. 133 pp.116-123 (2002)	
	CF2	Petrovita et al., The Journal of Neuroscience, Vol. 24, No. 38, pp.8237-8244 (September 22, 2004)	
	CG2	Yepes et al., American Journal of Pathology, Vol. 166, No. 2, pp.511-520 (February 2005)	
	CH2	Adams et al., Principles of Neurology, 6th Ed., New York, pp.1090-1095 (Standard Text Book)	
	CI2	Remington Pharmaceutical Science, Mack Publishing Co. (1990)	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not

Examiner Signature		Date Considered	
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